COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"Enriching Lives"

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TO: Each Supervisor

FROM: James A. Noyes
Director of Public Works

ADVANCE NOTIFICATION - INTENT TO NEGOTIATE WITH VENDOR AND FILE A REQUEST TO AWARD A TRAFFIC CONTROL SYSTEM AGREEMENT

NOTIFICATION

This memo provides advance notification to your Board that we intend to conduct contract negotiations with Econolite Control Products, Inc., for the procurement, installation, and system support for the traffic control system in the unincorporated area of the County. If negotiations are successful, we will file a request with the Executive Office for your Board's approval of the agreement. It is anticipated that the agreement will be for a not-to-exceed cost of $2,500,000. Funds will be provided by the Los Angeles County Metropolitan Transportation Authority (MTA) Grant for the San Gabriel Valley Traffic Signal Forum (86 percent) with County of Los Angeles Proposition C Local Return Matching Funds (14 percent).

PURPOSE

Since 1995, we have administered Intelligent Transportation System (ITS) projects on behalf of three subregional areas of the County. The primary system component of these projects is a traffic control system that allows traffic signals to be monitored and controlled from a remote location, such as a traffic management center, city hall, or a maintenance yard. This agreement will provide for procurement, installation, and system support of the Econolite Pyramids product for traffic signals in the unincorporated areas of the County. The agreement will also include a Countywide license and negotiated price list for other agencies in the County that purchase this system for their traffic signals.

MTA has provided us with grant funding to administer ITS projects. MTA's deadline to expend these grants is June 30, 2005. The traffic control system is the critical component of the entire ITS program, and any delay in procurement will jeopardize our ability to expend these grant funds by this deadline.

This traffic control system will provide for continuous monitoring of traffic conditions and traffic signal operations and build upon the benefits achieved by the traffic signal synchronization projects currently underway by us. The system will provide once-per-second monitoring of traffic signals. Traffic signal monitoring will provide my engineering staff with immediate notification of signal malfunctions, thereby enabling faster and more efficient maintenance responses. The system also enables traffic signal timing to be controlled and coordinated from remote workstations to adjust to actual traffic conditions. Currently, my maintenance staff can only change traffic signal timing at the actual traffic signal location. The traffic control system will provide two-way communications and control functions between the traffic signal controllers and staff's workstations.

Once installed, this traffic control system will interface with the County's Information Exchange Network, thereby allowing for the exchange of arterial traffic data and information between the cities, Caltrans, and us. This information sharing will provide for implementation of arterial traffic management strategies and coordinated traffic signal operations. It also enables agencies to work together to reduce response time during incidents and emergencies. This capability to monitor and control the operation of traffic signals between jurisdictions will benefit the motorists and transit users that rely on the arterial highways.

PROCUREMENT PROCESS

Our Traffic and Lighting Division conducted an extensive evaluation of commercial off-the-shelf traffic control systems. Although a formal request for proposal was not solicited, a competitive process was employed that considered all potential traffic control systems. We did not consider system cost as the selection of a "low bid" system could result in poor performance, or require extensive training and/or modifications, substantially increasing the financial and resource impacts to the County.

In 1999, two consultants under contract with us asked nine vendors of traffic control systems to respond to our requirements survey. As a result of this survey and the ensuing evaluation, these consultants indicated that several systems might meet our needs. Subsequent to this survey, seven additional vendors approached us

expressing an interest in the procurement. Consequently, our evaluation considered all 16 interested vendors.

Eleven of the initial 16 vendors responded to our request for information. All 11 systems were evaluated for requirements conformance using the same rating criteria and weighted scoring system developed by our outside consultants during the initial evaluation process. Upon reviewing the 11 responses, two systems were eliminated because they clearly did not meet our standards.

The remaining nine vendors were invited to conduct system demonstrations and respond to 16 follow-up questions regarding our requirements. Of the nine vendor demonstrations, four vendors were eliminated because their systems required significant hardware modifications to our existing traffic signals and/or they could not operate across multiple jurisdictions. The requirement to operate without modification to our traffic signals was significant because such changes would increase our costs markedly and cause substantial impact on our staff to complete and incorporate these modifications. The requirement to operate across multiple jurisdictions was also critical because we currently operate traffic signals for numerous other jurisdictions in the County.

The remaining five vendors under consideration were further evaluated by our staff with hands-on testing. The five vendors were each given our evaluation criteria prior to the tests. Each vendor was also provided with both written and verbal reviews of our evaluations of the tests.

In the last step of our evaluation process, we conducted site visits to jurisdictions operating the first and second ranked systems. Upon completion of our evaluation process, we determined that Econolite's Pyramids traffic control system was our preferred choice. Econolite was selected for the following reasons:

- Ease of Use: Econolite's system is significantly easier to perform system start-up functions, such as entering traffic signal information into the database, creating the graphical map displays, and establishing the communications links between the map icons and the field devices.

- Minimal Training: Econolite's system is intuitive in comparison to the other systems evaluated. Staff can readily locate an icon or pull-down menu to perform a desired function without consulting the users manual.

- Additional Functionality: Econolite's system provides a tracking system for timing complaints made by the public. No other system had this feature.

- Graphical Display: Econolite's system allows staff to locate field devices and download device data via a map display and a hierarchical display. The hierarchical display organizes devices into a tree structure and allows staff to group devices by type, geographical area, or links. This feature will enable staff to monitor and control the County's traffic signal system more efficiently. All other systems evaluated provided only a map display.

We are working with County Counsel and outside legal counsel that specializes in technology/software contracts to negotiate and develop the agreement. In addition, we are consulting with the Chief Information Office to review our purchase.

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cc: Chief Information Office (Howard Baker)
County Counsel (Dave Michaelson)